PB-216 704

SEWAGE AND WATER WORKS CONSTRUCTION 1963

Public Health Service
Washington, D. C.

July 1964

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

PB 216 704

SEWAGE AND WATER WORKS CONSTRUCTION 1963

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
U S Department of Commerce
Springfield VA 22151

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

SEWAGE AND WATER WORKS CONSTRUCTION 1963

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Division of Water Supply and Pollution Control
Washington, D.C. 20201

I

Related Publications

Sewage Treatment Works Contract Awards, 1952–1957
Public Health Service Publication No. 633

Sewage and Water Works Construction, 1957
Public Health Service Publication No. 608

Sewage and Water Works Construction, 1958
Public Health Service Publication No. 673

Sewage and Water Works Construction, 1959 edition
Public Health Service Publication No. 758

Sewage and Water Works Construction, 1960 edition
Public Health Service Publication No. 758

Sewage and Water Works Construction, 1961 edition
Public Health Service Publication No. 758

Sewage and Water Works Construction, 1962 edition
Public Health Service Publication No. 758

Public Health Service Publication No. 758
1963 Edition
July 1964

II

PREFACE

This annual report of "Sewage and Water Works Construction 1963" is published as one part of the basic data program required and authorized in Public Law 660 (as amended by Public Law 87-88), the Federal Water Pollution Control Act.

The data published herein provide a continuing and ready source of information and reference as to how successfully the national needs in municipal water supply and pollution control are being met through construction of the necessary physical facilities.

This publication also establishes important year-to-year cost trends in the national economic picture in the three types of public works construction involved. Such data are valuable not only to Federal, State and local government authorities and officials responsible for providing water supplies and for controlling pollution, but are also valuable to the building and contracting trades and to the engineering profession.

This report was prepared by Kenneth H. Jenkins, Chief Statistician and Florence G. Simmons, Statistical Assistant, under the direction of Richard S. Green, Sanitary Engineer Director and Chief of the Basic Data Branch, Division of Water Supply and Pollution Control.

CONTENTS

	Page
Preface	III
Section I—GENERAL PRESENTATION OF SEWAGE AND WATER WORKS CONTRACT AWARDS	1
A. Contract Awards—1963	1
B. Method of Data Collection	1
Table 1. Annual Contract Awards—1952–1963	2
Table 2. Monthly Contract Awards—1963	2
Table 3. Total Contract Awards by States—1963	3
Table 4. Distributed Total Contract Awards by States—1963	4
Section II—CONTRACT AWARDS—BASIC DATA—1963	5
A. Sewage Treatment Works Construction	5
Table 5. By Population Size Groups	5
Table 6. By Contract Size Groups	6
Table 7. By Drainage Basins	6
Table 8. By States	7
B. Collecting Sewer Construction	8
Table 9. By Population Size Groups	8
Table 10. By Contract Size Groups	8
Table 11. By Drainage Basins	8
C. Water Works Construction	9
Table 12. By Population Size Groups	9
Table 13. By Contract Size Groups	10
Table 14. By Drainage Basins	10
Table 15. By States	11
D. Combination Construction	12
Table 16. By Population Size Groups	12
Table 17. By Contract Size Groups	12
Table 18. By Drainage Basins	12

SECTION I—GENERAL PRESENTATION OF SEWAGE AND WATER WORKS CONTRACT AWARDS

A. CONTRACT AWARDS—1963

Contract awards in the sewage and water works field in calendar year 1963 reached a record level of more than $1.6 billion. The total dollar value in millions is broken down as follows:

Sewage treatment	$679.1
Collecting sewers	404.7
Water works	589.8
	1,673.6

Contracts associated with sewage treatment were awarded at a record level, showing a 25 percent increase over the figure for 1962. Both collecting sewer and water works contract awards levels increased moderately in 1963. Annual figures show a 26 percent increase from 1962 figures for collecting sewer contracts, and a 16 percent increase from 1962 figures for water works contracts.

Each of the above totals is based upon an identified and an apportioned figure. The identified contracts are those for which the descriptive information available clearly states a single type of construction. Those contracts that cover more than a single type are called "combination" contracts. These combination contracts are then apportioned to the sewage treatment works, collecting sewers, and water works categories on the basis of known national experience in each of these.

On a constant dollar basis, the total dollar value of contract awards in the sewage and water works fields in 1963 continued to rise to record levels in spite of increases in construction costs. A comparison on a constant dollar basis with current dollars illustrates the effect of these increases. Attention is called to the first note under table 1 which explains the use of new indices to compute constant dollars on a 1957–59 basis.

B. METHOD OF DATA COLLECTION

The contract award data presented in this publication for the year 1963 result from the careful examination of over 25,000 contract notifications in the sewage and water works construction and related fields. All notifications of similar contracts awarded in the same geographical area are checked to reduce the chance of duplication. Certain contracts, primarily those covering sewage treatment plants, are checked and verified by the various State water pollution control agencies.

The data on which this report is based were obtained from:

1. F. W. Dodge Corporation, daily reports on construction in the sewage and water works fields in the 38 Eastern States.
2. Various construction news periodicals, such as, *Construction News Bulletin*, *Pacific Architect and Builder*, *Rocky Mountain Construction*, and *Southwest Builder and Contractor*.

Practically all of the information for the 38 Eastern States is obtained from daily reports of the F. W. Dodge Corp.

The data presented are composed of contracts awarded by municipalities, special districts, other governmental bodies, and various institutions, resorts, recreation centers, etc. A few contracts are included for industries where the cost of such facilities can be readily identified, and where it is possible to ascertain that the facilities are primarily for the disposal of sanitary wastes or for domestic water works facilities.

TABLE 1—*Annual contract awards—sewage treatment works, collecting sewers, and water works—1939–63*

[Millions of dollars]

Year	Sewage treatment		Collecting sewers		Water works		Total	
	Actual	1957–59	Actual	1957–59	Actual	1957–59	Actual	1957–59
1939	197	178	320	288	357	322	874	788
1940	197	175	306	267	369	322	872	764
1941	239	203	346	294	380	323	965	820
1942	271	227	371	310	394	329	1,036	866
1943	254	203	354	283	442	354	1,050	840
1944	315	247	347	272	477	374	1,139	893
1945	299	234	313	245	474	371	1,086	850
1946	340	266	339	265	474	371	1,153	902
1947	350	274	339	265	509	398	1,198	937
1948	445	348	382	299	543	425	1,370	1,072
1949	542	424	395	309	567	444	1,504	1,177
1950	679	531	466	364	580	454	1,674	1,309

Notes:

1. Constant dollars on a 1957–59 base were computed as follows: Sewers from PHS Sewer Construction Cost Index (PHS Publication 1138); sewage treatment a composite 60 percent sewers (Publication 1138) and 40 percent PHS Sewage Treatment Plant Construction Cost Index (PHS Publication 1088); water from *Engineering News-Record* construction cost index changed to a 1957–59 base.

2. The Public Health Service sewage treatment data prior to 1957 are composed of identified contracts only. Beginning with 1957, the figures include an amount apportioned to sewage treatment works from the "combination" contracts.

3. Data on collecting sewers prior to 1957 are obtained by subtracting Public Health Service sewage treatment data from the U.S. Department of Commerce sewer data which includes sanitary and storm sewerage systems as well as sewage treatment works. Beginning with 1957, the data for collecting sewers were assembled by the Public Health Service and do not include storm sewers.

4. The waterworks data prior to 1957 are based on records maintained by the U.S. Department of Commerce. Beginning with 1957, data were obtained by the Public Health Service.

TABLE 2—*Monthly contract awards—sewage treatment works, collecting sewers, and water works—1963*

[Millions of dollars]

Month	Sewage treatment		Collecting sewers		Water works		Total	
	Actual	Cumulative	Actual	Cumulative	Actual	Cumulative	Actual	Cumulative
January	55.0	55.0	39.0	39.0	31.0	31.0	125.0	125.0
February	87.3	142.3	17.9	56.9	26.1	56.1	131.3	256.3
March	47.2	189.5	16.9	73.8	68.4	124.5	142.5	398.8
April	48.3	237.8	38.7	112.5	52.8	177.3	139.8	538.6
May	54.7	292.5	40.0	152.5	54.9	232.2	149.6	688.2
June	54.2	347.0	45.9	198.4	57.5	289.7	157.5	845.7
July	48.6	395.3	45.4	244.8	57.3	346.9	151.3	997.0
August	51.4	476.8	37.3	282.1	61.6	407.5	150.3	1,154.4
September	38.9	514.6	37.0	319.1	49.7	457.2	125.6	1,280.0
October	36.8	551.3	38.4	357.5	43.7	500.9	118.7	1,398.8
November	35.4	586.8	37.6	395.0	42.1	543.0	115.1	1,513.8
December	72.4	659.1	36.2	431.7	47.8	590.8	156.4	1,670.2

TABLE 3.—1965 contract awards by States

State	Total		Sewage treatment		Sewers		Water		Combinations	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Alabama	173	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Alaska	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arizona	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arkansas	177	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
California	1,098	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Colorado	118	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Connecticut	111	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Delaware	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
District of Columbia	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Florida	306	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Georgia	168	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hawaii	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Idaho	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Illinois	301	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Indiana	198	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iowa	183	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kansas	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kentucky	160	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	130	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maine	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maryland	110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Massachusetts	205	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Michigan	440	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Minnesota	215	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	158	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Missouri	199	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Montana	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nebraska	272	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nevada	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Hampshire	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Jersey	196	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Mexico	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New York	664	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Carolina	195	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Dakota	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ohio	428	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oklahoma	204	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oregon	127	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pennsylvania	596	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Puerto Rico	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rhode Island	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Carolina	110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Dakota	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tennessee	224	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Texas	667	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Utah	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vermont	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Virginia	227	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Washington	228	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Virginia	98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wisconsin	253	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wyoming	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	11,020	[illegible]	2,004	[illegible]	2,160	[illegible]	4,007	[illegible]	1,209	[illegible]

TABLE 4.—1963 contract awards (dollar-value) by State

State	Total	Average construction	Grants	Water
Alabama	[illegible]	[illegible]	[illegible]	[illegible]
Alaska	[illegible]	[illegible]	[illegible]	[illegible]
Arizona	[illegible]	[illegible]	[illegible]	[illegible]
Arkansas	[illegible]	[illegible]	[illegible]	[illegible]
California	[illegible]	[illegible]	[illegible]	[illegible]
Colorado	[illegible]	[illegible]	[illegible]	[illegible]
Connecticut	[illegible]	[illegible]	[illegible]	[illegible]
Delaware	[illegible]	[illegible]	[illegible]	[illegible]
District of Columbia	[illegible]	[illegible]	[illegible]	[illegible]
Florida	[illegible]	[illegible]	[illegible]	[illegible]
Georgia	[illegible]	[illegible]	[illegible]	[illegible]
Hawaii	[illegible]	[illegible]	[illegible]	[illegible]
Idaho	[illegible]	[illegible]	[illegible]	[illegible]
Illinois	[illegible]	[illegible]	[illegible]	[illegible]
Indiana	[illegible]	[illegible]	[illegible]	[illegible]
Iowa	[illegible]	[illegible]	[illegible]	[illegible]
Kansas	[illegible]	[illegible]	[illegible]	[illegible]
Kentucky	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	[illegible]	[illegible]	[illegible]	[illegible]
Maine	[illegible]	[illegible]	[illegible]	[illegible]
Maryland	[illegible]	[illegible]	[illegible]	[illegible]
Massachusetts	[illegible]	[illegible]	[illegible]	[illegible]
Michigan	[illegible]	[illegible]	[illegible]	[illegible]
Minnesota	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	[illegible]	[illegible]	[illegible]	[illegible]
Missouri	[illegible]	[illegible]	[illegible]	[illegible]
Montana	[illegible]	[illegible]	[illegible]	[illegible]
Nebraska	[illegible]	[illegible]	[illegible]	[illegible]
Nevada	[illegible]	[illegible]	[illegible]	[illegible]
New Hampshire	[illegible]	[illegible]	[illegible]	[illegible]
New Jersey	[illegible]	[illegible]	[illegible]	[illegible]
New Mexico	[illegible]	[illegible]	[illegible]	[illegible]
New York	[illegible]	[illegible]	[illegible]	[illegible]
North Carolina	[illegible]	[illegible]	[illegible]	[illegible]
North Dakota	[illegible]	[illegible]	[illegible]	[illegible]
Ohio	[illegible]	[illegible]	[illegible]	[illegible]
Oklahoma	[illegible]	[illegible]	[illegible]	[illegible]
Oregon	[illegible]	[illegible]	[illegible]	[illegible]
Pennsylvania	[illegible]	[illegible]	[illegible]	[illegible]
Puerto Rico	[illegible]	[illegible]	[illegible]	[illegible]
Rhode Island	[illegible]	[illegible]	[illegible]	[illegible]
South Carolina	[illegible]	[illegible]	[illegible]	[illegible]
South Dakota	[illegible]	[illegible]	[illegible]	[illegible]
Tennessee	[illegible]	[illegible]	[illegible]	[illegible]
Texas	[illegible]	[illegible]	[illegible]	[illegible]
Utah	[illegible]	[illegible]	[illegible]	[illegible]
Vermont	[illegible]	[illegible]	[illegible]	[illegible]
Virginia	[illegible]	[illegible]	[illegible]	[illegible]
Washington	[illegible]	[illegible]	[illegible]	[illegible]
West Virginia	[illegible]	[illegible]	[illegible]	[illegible]
Wisconsin	[illegible]	[illegible]	[illegible]	[illegible]
Wyoming	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]

SECTION B—CONTRACT AWARDS—BASIC DATA—1963

This section presents the basic data as compiled; combination projects have not been apportioned. Tables of contract awards by population size groups, contract size groups, drainage basins and States are included.

The population size group tables do not refer to the population served. They represent the size of the community in which each contract was awarded. The population size groups of some contracts were unknown; these contracts consist primarily of schools, hospitals, military bases, and parks. The cumulative percentages shown in these tables are based on the known population groups.

A. SEWAGE TREATMENT WORKS CONSTRUCTION

The sewage treatment works are presented in two categories, namely, NEW PLANT and OTHER. The "NEW PLANT" classification includes stabilization ponds and appurtenances. The "OTHER" category includes replacements and additions to existing treatment plants, interceptors, and outfalls. This category also includes contracts whose costs cannot be separated between "New Plant" and "Other." Therefore, the "Other" classification may include a few new plants.

In 1963 the level of contracts awarded for construction of sewage treatment works in the United States reached a level of $870.1 million. Of this amount $598.9 million covered contracts identified as to specific location and type of construction. The following tables, 5 through 8, inclusive, relate only to contracts individually identified for sewage treatment facilities.

Lists of the locations of contract awards for sewage treatment works are available upon request. Write to Chief, Basic Data Branch, Division of Water Supply and Pollution Control, U.S. Department of Health, Education, and Welfare, Public Health Service, Washington, D.C., 20201.

TABLE 5.—*Contract awards—sewage treatment works construction—1963—by population size groups*

Population size group	Total				New plant				Other[1]			
	Number	Dollars	Cumulative percent[2]		Number	Dollars	Cumulative percent[2]		Number	Dollars	Cumulative percent[2]	
			Number	Dollars			Number	Dollars			Number	Dollars
Unknown population size	139	6,645,000			80	3,301,700			60	3,344,000		
Under 500	147	6,900,000	2.6	1.7	84	4,400,000	12.9	5.0	60	2,500,000	4.9	1.2
500-1,000	200	15,000,000	10.0	4.6	120	9,000,000	28.1	7.3	110	6,100,000	12.4	3.0
1,000-2,500	311	35,000,000	25.4	10.0	140	15,000,000	44.0	12.0	180	20,000,000	25.3	6.0
2,500-5,000	300	45,000,000	42.7	15.3	165	25,000,000	70.3	20.0	130	20,000,000	38.3	13.1
5,000-10,000	280	55,000,000	58.0	20.3	90	25,000,000	78.3	28.0	170	30,000,000	48.7	20.0
10,000-25,000	200	75,000,000	73.7	40.0	60	27,000,000	86.1	40.7	140	48,000,000	64.0	40.0
25,000-50,000	110	60,000,000	77.0	47.1	30	15,000,000	88.0	48.7	80	45,000,000	73.0	48.0
50,000-100,000	110	80,000,000	80.0	57.7	31	32,000,000	90.1	60.0	80	48,000,000	78.0	58.0
100,000-250,000	111	85,000,000	88.0	66.0	30	32,000,000	96.1	68.3	80	53,000,000	88.0	68.0
250,000 and over	300	401,000,000	100.0	100.0	31	70,000,000	100.0	100.0	170	331,000,000	100.0	100.0
Total	2,500	870,100,000			750	304,000,000			1,500	566,000,000		

[1] Interceptors, outfalls, additions, enlargements, and alterations to plants, etc. [2] Cumulative percentages are based on the known population groups.

TABLE 6.—*Contract awards—sewage treatment works construction—1969—by contract size groups*

Contract size group (dollars)	Total				New plant				Other [1]			
	Number	Dollars	Cumulative (percent)		Number	Dollars	Cumulative (percent)		Number	Dollars	Cumulative (percent)	
			Number	Dollars			Number	Dollars			Number	Dollars
Under 10,000	88	686,000	6.8	0.1	10	86,784	3.6	0.0	78	643,364	5.0	0.1
10,000-24,999	372	6,845,734	37.6	0.9	106	1,940,042	37.7	0.9	266	5,005,089	37.4	0.8
25,000-49,999	365	12,307,344	65.6	2.0	127	4,385,568	84.3	2.9	234	7,907,887	66.3	2.9
50,000-99,999	283	19,940,438	86.4	5.0	108	11,006,368	88.3	6.0	227	13,006,709	68.4	5.9
100,000-249,999	180	26,545,884	74.3	10.0	108	25,179,368	77.6	16.7	210	46,373,301	73.5	10.9
250,000-499,999	107	36,110,000	87.3	16.0	91	35,010,471	86.0	23.0	166	46,000,104	86.0	21.3
500,000-1,000,000	107	116,000,000	96.0	44.7	81	80,000,000	98.3	60.1	116	43,000,000	94.0	36.7
1,000,000-2,000,000	56	105,000,000	98.4	62.0	56	86,700,107	98.4	67.1	60	123,700,000	96.3	55.3
Over 2,000,000	9	168,000,700	100.0	100.0	6	78,871,477	100.0	100.0	0	83,333,000	100.0	100.0
Total	1,564	388,540,110			710	313,000,100			1,364	388,007,000		

[1] Interceptors, manhole additions, micropanels, and alterations to plants, etc.

TABLE 7.—*Contract awards—sewage treatment works construction—1969—by drainage basins*

Drainage basin	Total		New plants		Other [1]	
	Number	Dollars	Number	Dollars	Number	Dollars
Northeast	178	65,000,000	66	16,000,000	109	49,000,000
North Atlantic	344	140,000,000	98	96,000,000	170	35,000,000
Southeast	230	35,000,000	78	16,000,000	130	20,000,000
Tennessee River	58	6,000,000	11	1,000,000	39	5,000,000
Ohio River	229	36,000,000	97	21,000,000	129	36,000,000
Lake Erie	98	13,000,000	18	2,000,000	77	6,000,000
Upper Mississippi	260	66,000,000	120	36,000,000	140	30,000,000
Western Great Lakes	121	36,000,000	48	7,000,000	73	29,000,000
Missouri River	173	33,000,000	66	6,000,000	108	27,000,000
Southwest-Lower Mississippi	200	46,000,000	80	16,000,000	120	30,000,000
Colorado River	33	11,000,000	6	000,000	19	11,000,000
Western Gulf	88	19,000,000	36	10,000,000	52	6,000,000
Pacific Northwest	94	36,000,000	35	16,000,000	59	20,000,000
California	170	16,000,000	78	6,000,000	92	10,000,000
Great Basin	37	7,000,000	5	6,000,000	32	1,000,000
Alaska	6	000,000	0	00,000	6	000,000
Hawaii	10	6,000,000			10	6,000,000
Puerto Rico	6	1,000,000	0	1,000,000	6	00,000
Total	1,564	000,000,000	710	000,000,000	1,364	000,000,000

[1] Interceptors, manhole additions, micropanels, and alterations to plants, etc.

TABLE 8.—*Contract awards—sewage treatment works construction—1963—by States*

State	Total		New plants		Other [1]	
	Number	Dollars	Number	Dollars	Number	Dollars
Alabama	53	13,143,413	19	4,584,429	34	8,558,989
Alaska	3	415,040	2	85,920	1	329,120
Arizona	9	10,128,674	2	26,150	7	10,102,524
Arkansas	37	7,810,493	13	4,029,047	24	3,781,446
California	109	19,115,909	18	5,512,140	91	13,603,769
Colorado	12	3,612,574	5	1,313,767	7	2,298,807
Connecticut	16	4,172,028	2	465,822	14	3,706,206
Delaware	8	1,028,854	3	546,075	5	482,780
District of Columbia	13	11,580,240			13	11,580,240
Florida	63	12,198,725	14	3,017,821	49	9,178,904
Georgia	35	12,091,020	9	3,133,388	26	8,957,632
Hawaii	18	8,470,229			18	8,470,229
Idaho	12	867,461	5	438,867	7	428,594
Illinois	118	49,976,667	38	4,322,560	80	45,654,107
Indiana	46	10,787,720	22	5,375,282	24	5,412,438
Iowa	68	8,163,453	31	2,928,111	37	5,235,342
Kansas	51	5,997,001	19	1,151,157	32	4,845,844
Kentucky	58	12,728,577	27	5,466,939	31	7,261,638
Louisiana	71	25,096,777	22	7,560,042	49	17,536,735
Maine	15	3,046,992	4	979,293	11	2,067,699
Maryland	29	5,377,375	5	935,262	24	4,442,113
Massachusetts	43	18,472,090	10	4,148,155	33	14,323,935
Michigan	62	14,882,564	25	6,417,932	37	8,464,632
Minnesota	55	14,735,349	30	4,305,880	25	10,429,469
Mississippi	30	5,273,439	16	3,841,047	14	1,432,412
Missouri	59	18,045,338	26	8,187,520	33	9,857,818
Montana	8	631,311	5	140,770	3	490,541
Nebraska	42	2,492,035	20	1,227,157	22	1,268,878
Nevada	3	1,297,744			3	1,297,744
New Hampshire	16	5,928,640	6	3,093,972	10	2,834,668
New Jersey	57	18,461,787	23	5,504,740	34	12,957,047
New Mexico	19	3,293,860	5	328,806	14	2,965,054
New York	77	69,064,777	22	53,106,045	55	15,958,732
North Carolina	39	6,500,624	14	2,834,187	25	3,666,437
North Dakota	13	536,893	4	72,116	9	464,777
Ohio	59	20,195,617	26	4,996,757	33	15,198,860
Oklahoma	48	7,527,290	15	2,912,121	33	4,615,169
Oregon	33	8,341,588	13	4,649,952	20	3,691,636
Pennsylvania	122	31,263,773	45	13,813,826	77	17,449,947
Puerto Rico	4	1,201,067	3	1,103,361	1	97,706
Rhode Island	16	10,860,029	1	17,511	15	10,842,518
South Carolina	29	6,098,132	13	2,760,564	16	3,337,568
South Dakota	11	658,929	3	79,292	8	579,637
Tennessee	46	8,272,436	20	2,394,179	26	5,878,257
Texas	85	18,022,343	42	11,326,545	43	6,695,798
Utah	10	6,686,919	3	6,129,956	7	556,963
Vermont	15	4,978,619	5	1,992,501	10	2,986,118
Virginia	47	9,480,726	11	3,569,028	36	5,911,698
Washington	37	29,559,214	12	13,159,866	25	16,399,348
West Virginia	22	6,179,430	9	777,151	23	5,402,279
Wisconsin	87	23,859,445	22	1,150,566	65	22,708,879
Wyoming	6	330,855	1	172,580	5	158,275
Total	2,054	606,940,110	710	215,552,155	1,344	393,057,955

[1] Interceptors, outfalls, additions, enlargements, and alterations to plants, etc.

B. COLLECTING SEWER CONSTRUCTION

Collecting sewer construction for 1963 totaled $404.7 million. Tables 9, 10, and 11 analyze the contract award data which was specified as purely collecting sewers (i.e., $353.3 million), and do not reflect any portion of the combination projects. The tabulation of the collecting sewer contract awards by States appears in table 3 of section I.

The collecting sewer classification does *not* include storm sewers.

TABLE 9.—*Contract awards—collecting sewer construction—1963—by population size groups*

Population size group	Collecting sewers			
	Number	Dollars	Cumulative percent [1]	
			Number	Dollars
Unknown population size	101	5,658,296		
Under 500	106	11,482,705	3.4	3.3
500–1,000	106	12,209,215	6.8	6.8
1,000–2,500	210	25,292,123	13.5	14.1
2,500–5,000	194	22,989,778	19.7	20.7
5,000–10,000	264	27,571,999	28.7	28.6
10,000–25,000	467	55,104,259	43.5	44.5
25,000–50,000	296	30,734,645	52.9	53.3
50,000–100,000	319	34,817,114	63.0	63.3
100,000–250,000	360	40,145,163	74.4	74.8
250,000 and over	811	87,282,676	100.0	100.0
Total	3,253	353,268,175		

[1] Cumulative percentages are based on the known population groups.

TABLE 10.—*Contract awards—collecting sewer construction—1963—by contract size groups*

Contract size group (dollars)	Collecting sewers			
	Number	Dollars	Cumulative percent	
			Number	Dollars
Under-10,000	804	2,672,136	15.5	0.8
10,000–25,000	736	12,170,217	38.1	4.2
25,000–50,000	666	23,534,405	58.6	10.9
50,000–100,000	493	35,407,312	73.8	20.9
100,000–250,000	519	81,482,835	89.8	44.0
250,000–500,000	187	65,366,066	95.5	62.5
500,000–1,000,000	118	83,110,095	99.1	86.0
1,000,000–5,000,000	30	49,194,079	100.0	99.9
Over 5,000,000			100.0	100.0
Total	3,253	353,268,175		

TABLE 11.—*Contract awards—collecting sewer construction—1963—by drainage basin*

Drainage basin	Collecting sewers		Drainage basin	Collecting sewers	
	Number	Dollars		Number	Dollars
Northeast	303	45,723,289	Colorado River	45	4,092,236
North Atlantic	476	73,605,291	Western Gulf	126	10,665,847
Southeast	201	30,361,099	Pacific Northwest	109	10,184,380
Tennessee River	26	3,687,128	California	431	23,730,589
Ohio River	301	40,822,564	Great Basin	26	1,722,260
Lake Erie	78	8,010,230	Alaska	6	1,551,842
Upper Mississippi	319	25,879,803	Hawaii	8	1,904,110
Western Great Lakes	283	28,917,883	Puerto Rico	12	1,631,972
Missouri River	292	16,317,871			
Southwest-Lower Mississippi	211	24,489,842	Total	3,253	353,268,175

C. WATER WORKS CONSTRUCTION

The water works data are broken down into four categories, namely, SOURCE, TREATMENT, DISTRIBUTION, and MISCELLANEOUS. The "SOURCE" group includes contracts awarded for wells, surface source development, and transmission lines. The "TREATMENT" area includes contracts for plants and auxiliary facilities. The "DISTRIBUTION" category includes contracts for ground storage, elevated tanks, and distribution systems. The "MISCELLANEOUS" classification includes contracts for pumping facilities and for water systems in general. When it is not possible to code a contract that is known to pertain to water into source, treatment, or distribution then it is included in the totals for miscellaneous.

Contract awards for water works construction in 1963, including an apportioned amount from the combination contracts, totaled $589.8 million. The tables following refer only to contracts that pertain exclusively to water works (i.e., $565.2 million).

TABLE 12.—*Contract awards—water works construction—1963—by population size groups*

Population size group	Total		Source		Treatment		Distribution		Miscellaneous[1]	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Unknown population size	297	15,841,072	79	1,895,560	15	1,328,963	124	7,241,576	79	5,409,973
Under 500	441	28,857,988	82	2,215,839	34	2,879,264	215	12,083,418	110	11,699,472
500-1,000	360	19,630,458	77	2,109,340	29	1,800,972	172	9,376,300	82	6,334,846
1,000-2,500	546	38,705,766	113	4,394,634	50	4,863,303	278	18,145,383	105	11,323,446
2,500-5,000	607	44,369,286	104	7,165,032	36	6,329,857	274	21,147,355	93	9,526,042
5,000-10,000	517	48,426,251	99	7,898,053	42	9,278,071	299	21,827,921	77	10,094,206
10,000-25,000	713	92,957,359	135	25,594,777	38	9,266,271	437	37,997,463	103	20,098,828
25,000-50,000	420	49,095,308	83	11,168,384	24	5,425,526	288	23,227,255	45	9,274,601
50,000-100,000	289	35,480,205	58	24,590,935	13	14,338,645	173	14,749,755	25	2,800,870
100,000-250,000	246	86,668,043	61	21,388,477	7	621,991	151	10,951,559	27	3,696,026
250,00 and over	681	134,066,563	113	55,995,039	27	27,168,768	482	39,972,535	59	10,927,241
Total	4,997	565,161,224	1,004	164,092,070	315	98,498,643	2,873	216,180,550	805	98,414,981

[1] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

TABLE 12A—*Contract awards—water works construction—1963—by population size groups—cumulative percentages* [1]

Population size group	Total cumulative (percent)		Source cumulative (percent)		Treatment cumulative (percent)		Distribution cumulative (percent)		Miscellaneous[2] cumulative (percent)	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Unknown population size										
Under 500	9.4	5.3	8.9	1.4	11.3	3.4	7.8	5.8	18.2	12.6
500-1,000	17.1	8.9	17.2	2.7	21.0	5.5	14.1	10.3	28.5	19.4
1,000-2,500	28.7	15.9	29.4	5.4	37.7	11.2	24.2	19.0	41.0	31.6
2,500-5,000	39.5	24.0	40.6	9.8	49.7	18.9	34.2	29.1	53.8	41.8
5,000-10,000	50.5	32.8	51.3	14.5	63.7	29.8	45.1	39.4	64.4	52.6
10,000-25,000	65.7	48.7	65.9	30.3	76.4	40.7	61.0	57.4	78.6	74.8
25,000-50,000	74.6	58.6	74.9	37.2	84.4	46.6	70.7	68.5	84.8	81.2
50,000-100,000	80.3	68.9	81.2	52.4	88.7	67.4	77.0	75.8	88.2	84.2
100,000-250,000	85.5	75.6	87.8	65.6	91.0	68.1	82.8	80.9	91.9	88.2
250,000 and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Cumulative percentages are based on the known population groups.

[2] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

TABLE 13.—*Contract awards—water works construction—1963—by contract size groups*

Contract size group (dollars)	Total		Source		Treatment		Distribution		Miscellaneous [1]	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 10,000	780	3,998,179	211	1,152,663	15	80,443	443	2,260,801	91	504,272
10,000-25,000	1,221	20,338,329	278	4,807,144	44	730,876	733	12,313,676	166	2,786,633
25,000-50,000	1,021	36,474,910	166	5,850,788	48	1,725,377	646	23,170,434	161	5,728,311
50,000-100,000	817	58,008,181	110	7,693,696	55	4,045,831	506	35,925,661	146	10,342,993
100,000-250,000	708	109,466,794	111	17,391,098	76	11,727,784	370	57,860,460	146	22,487,452
250,000-500,000	296	99,245,435	62	22,258,340	47	16,493,206	119	40,879,438	58	19,611,372
500,000-1,000,000	122	83,128,469	33	23,379,792	16	11,526,648	47	39,964,515	26	18,257,434
1,000,000-5,000,000	60	111,084,819	29	56,560,347	11	22,022,633	9	13,785,595	11	18,696,244
Over 5,000,000	7	43,439,147	4	25,208,302	3	18,140,845				
Total	4,997	565,161,224	1,004	164,092,070	315	86,493,643	2,873	216,160,580	808	98,414,931

[1] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

TABLE 13A.—*Contract awards—water works construction—1963—by contract size groups—cumulative percentages*

Contract size group (dollars)	Total cumulative (percent)		Source cumulative (percent)		Treatment cumulative (percent)		Distribution cumulative (percent)		Miscellaneous [1] cumulative (percent)	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 10,000	15.2	0.7	21.0	0.7	4.8	0.1	15.4	1.0	11.3	0.5
10,000-25,000	39.6	4.3	48.7	3.4	18.8	0.9	40.9	6.7	31.9	3.3
25,000-50,000	60.0	10.8	65.2	7.0	34.0	2.9	63.4	17.4	51.9	9.1
50,000-100,000	76.3	21.1	76.2	11.7	51.5	7.6	81.0	34.0	70.0	19.6
100,000-250,000	90.4	40.5	87.3	22.3	75.6	21.2	93.9	60.8	88.1	42.4
250,000-500,000	96.1	58.1	93.5	35.9	90.5	40.3	98.0	79.7	95.3	62.3
500,000-1,000,000	98.5	72.8	96.8	50.1	95.6	53.6	99.6	93.6	98.5	80.9
1,000,000-5,000,000	99.7	92.5	99.7	84.6	99.1	79.1	99.9	100.0	99.9	99.9
Over 5,000,000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

TABLE 14.—*Contract awards—water works construction—1963—by drainage basins*

Drainage basin	Total		Source		Treatment		Distribution		Miscellaneous [1]	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Northeast	430	47,227,617	73	12,752,104	23	9,209,415	272	19,041,484	62	6,224,614
North Atlantic	491	47,672,055	88	13,577,233	22	5,765,032	320	22,583,928	61	5,745,863
Southeast	548	63,200,664	128	14,580,343	37	10,377,648	278	21,407,096	103	16,935,577
Tennessee River	77	11,855,975	7	435,099	13	2,098,482	41	4,942,840	16	4,379,575
Ohio River	542	86,660,752	74	7,274,589	60	11,616,645	323	26,767,622	85	11,181,896
Lake Erie	110	11,975,297	17	4,354,928	12	3,234,269	75	4,214,341	6	171,799
Upper Mississippi	430	45,572,805	103	9,480,476	43	15,967,061	231	14,536,973	73	5,919,295
Western Great Lakes	350	44,749,359	64	9,146,209	21	5,367,243	224	25,261,431	31	4,754,476
Missouri River	386	27,813,335	91	7,296,548	24	3,666,950	200	11,212,880	71	5,607,289
Southwest-Lower Mississippi	488	44,857,164	102	7,748,527	35	4,407,473	267	19,[illegible]52,182	84	12,818,982
Colorado River	98	26,943,550	23	8,391,644	3	8,729,206	24	7,084,275	18	2,738,423
Western Gulf	378	34,964,906	89	13,045,473	12	1,008,912	244	12,302,676	53	8,516,845
Pacific Northwest	158	10,925,697	15	1,745,544	2	259,027	106	7,194,808	35	1,729,318
California	416	75,334,208	93	50,938,503	6	4,463,194	231	16,005,890	86	6,926,631
Great Basin	37	3,305,249	7	572,858	1	9,286	14	1,837,978	15	946,127
Alaska	7	3,121,989	----------	----------	1	12,989	4	718,038	2	2,390,773
Hawaii	5	1,589,509	----------	----------	----------	----------	1	365,943	4	1,203,566
Puerto Rico	50	3,737,411	50	2,773,034	----------	----------	8	740,595	2	223,782
Total	4,997	565,161,224	1,004	164,092,070	315	86,493,643	2,873	216,160,580	805	98,414,931

[1] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

TABLE 15.—*Contract awards—water works construction—1963—by States*

State	Total		Source		Treatment		Distribution		Miscellaneous [1]	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Alabama	77	9,193,965	19	2,409,494	4	977,621	36	2,227,540	18	3,579,310
Alaska	7	3,121,669			1	12,860	4	718,036	2	2,390,773
Arizona	30	13,067,817	12	3,031,554	2	8,021,826	13	1,931,607	3	102,830
Arkansas	101	9,929,633	20	1,448,381	9	1,513,063	49	3,748,808	23	3,219,661
California	433	79,552,191	95	50,993,897	6	4,463,184	238	16,778,497	94	7,316,613
Colorado	77	18,008,068	24	6,149,404	3	1,070,936	37	9,081,094	13	1,706,634
Connecticut	26	3,733,697	4	1,700,580	2	878,900	16	894,737	4	259,470
Delaware	10	443,142	3	108,462	2	12,410	1	4,250	4	318,020
District of Columbia	9	1,146,213	2	589,715	1	14,300	5	368,198	1	173,000
Florida	134	16,255,292	32	2,446,555	12	3,935,712	86	5,948,993	24	3,924,027
Georgia	104	12,420,833	18	2,305,926	8	1,588,801	57	3,637,586	21	4,897,520
Hawaii	5	1,869,509					1	365,843	4	1,203,666
Idaho	4	151,896					2	17,991	2	133,905
Illinois	249	26,640,970	44	3,271,432	19	10,802,364	135	7,288,230	51	5,278,924
Indiana	133	8,244,062	21	800,692	16	1,428,928	71	3,967,181	25	2,047,261
Iowa	82	5,238,562	22	598,584	13	2,390,718	38	1,989,829	9	391,431
Kansas	94	7,239,644	12	1,128,079	9	811,743	53	2,896,882	20	2,402,940
Kentucky	106	11,054,879	13	1,859,200	15	1,904,286	64	4,872,891	14	2,418,502
Louisiana	94	8,766,346	27	2,031,884	7	618,374	51	5,123,929	9	992,189
Maine	11	455,771	1	19,049			8	392,740	2	43,982
Maryland	80	10,703,416	15	7,292,989	1	13,900	56	2,928,105	8	468,422
Massachusetts	157	9,777,966	28	2,575,839	3	492,459	102	5,703,216	24	1,006,452
Michigan	208	34,288,543	42	8,261,299	13	3,021,301	137	18,946,572	16	4,059,371
Minnesota	116	12,852,342	27	2,627,644	16	3,077,594	63	6,868,505	10	278,599
Mississippi	92	6,242,279	31	1,409,089	3	151,513	43	2,521,338	15	2,160,339
Missouri	115	12,940,548	29	4,942,130	12	3,556,530	45	1,838,748	29	2,612,140
Montana	13	723,065			1	42,970	9	247,440	3	422,655
Nebraska	88	3,326,868	19	1,054,649	3	102,732	54	1,613,819	12	555,648
Nevada	14	2,056,999	8	1,004,695	1	9,256	3	554,382	2	488,665
New Hampshire	12	894,856	4	76,415			5	253,536	3	264,905
New Jersey	73	4,078,187	13	300,330	3	239,600	46	2,694,583	11	843,674
New Mexico	37	6,524,037	11	3,159,172	1	16,995	9	1,378,725	16	1,969,145
New York	391	46,196,894	63	9,873,938	26	10,390,566	262	19,299,533	40	6,634,857
North Carolina	122	12,545,289	26	2,468,795	9	1,909,973	67	7,727,945	20	2,438,576
North Dakota	27	1,072,024	5	58,281	3	195,837	12	341,824	7	476,282
Ohio	209	23,454,904	37	5,526,639	17	7,558,489	135	7,869,243	20	20,860,533
Oklahoma	142	13,397,244	21	2,317,734	8	1,564,021	92	6,554,638	21	2,960,851
Oregon	37	2,272,395	7	1,238,063			25	828,396	5	205,916
Pennsylvania	210	24,466,226	40	3,531,718	11	3,455,897	128	14,144,067	31	3,034,544
Puerto Rico	58	3,273,306	49	2,753,716			7	315,808	2	223,782
Rhode Island	15	1,264,515			1	43,700	12	1,046,075	2	174,740
South Carolina	69	10,160,887	13	4,204,158	6	2,265,115	38	2,375,124	12	1,316,490
South Dakota	28	1,514,067	16	600,295	1	135,377	18	751,539	3	26,856
Tennessee	114	18,965,429	5	1,073,995	18	3,412,253	69	8,700,831	22	5,773,370
Texas	375	33,332,234	65	11,255,639	11	992,917	250	12,521,751	49	8,561,927
Utah	22	2,955,599	3	121,578			9	1,330,646	10	1,503,375
Vermont	5	375,236	1	14,750			2	286,154	2	74,304
Virginia	50	5,235,002	7	1,819,822	3	423,470	32	2,137,678	8	954,032
Washington	116	8,240,282	8	307,461	2	259,027	80	6,385,738	26	1,088,056
West Virginia	46	4,667,705	5	715,759	6	797,057	24	1,930,683	11	1,344,197
Wisconsin	159	8,999,022	33	938,011	6	1,901,429	102	5,624,140	18	534,442
Wyoming	11	2,269,678	4	1,200,559	1	17,909	2	304,800	4	746,710
Total	4,997	585,161,224	1,034	164,092,070	315	86,493,643	2,873	216,160,880	803	98,414,931

[1] This includes separate contracts for pumping facilities and other water works contracts that cover more than one of the above divisions.

D. COMBINATION CONSTRUCTION

Combination contracts are made up of projects that cover more than one of the three major categories: (1) Sewage treatment; (2) collecting sewers; and (3) water works. The combination contract awards by States appear in table 3 of section 1.

TABLE 16.—*Contract awards—combination construction—1963—by population size groups*

Population size group	Combinations [1]			
	Number	Dollars	Cumulative percent [2]	
			Number	Dollars
Unknown population size	48	3,182,856		
Under 500	48	4,543,271	4.1	3.0
500–1,000	76	10,345,384	10.5	9.8
1,000–2,500	104	15,554,863	19.3	20.0
2,500–5,000	87	9,634,484	26.7	26.3
5,000–10,000	102	13,316,422	35.3	35.0
10,000–25,000	140	20,081,859	47.7	48.1
25,000–50,000	96	22,805,947	55.8	62.8
50,000–100,000	87	12,081,375	60.6	70.7
100,000–250,000	69	9,634,403	66.4	76.6
250,000 and over	397	35,929,979	100.0	100.0
Total	1228	155,304,843		

[1] This includes contracts whose descriptive information covers more than a single category of construction (e.g., sewage treatment, sewers, or water works).

[2] Cumulative percentages are based on the known population groups.

TABLE 17.—*Contract awards—combination construction—1963—by contract size groups*

Contract size group (dollars)	Combinations [1]			
	Number	Dollars	Cumulative percent	
			Number	Dollars
Under 10,000	139	826,055	11.3	0.5
10,000–25,000	324	5,824,192	37.7	4.0
25,000–50,000	242	8,944,308	57.4	9.7
50,000–100,000	178	12,275,200	71.9	17.6
100,000–250,000	213	22,865,244	89.2	32.6
250,000–500,000	74	24,047,638	95.2	54.0
500,000–1,000,000	38	25,781,295	98.3	70.5
1,000,000–5,000,000	19	38,444,237	99.8	95.1
Over 5,000,000	1	7,542,366	100.0	100.0
Total	1,228	155,304,843		

[1] This includes contracts whose descriptive information covers more than a single category of construction (e.g., sewage treatment, sewers, or water works).

TABLE 18.—*Contract awards—combination construction—1963—by drainage basin*

Drainage basin	Combinations [1]		Drainage basin	Combinations [1]	
	Number	Dollars		Number	Dollars
Northeast	38	7,982,604	Colorado River	10	800,488
North Atlantic	411	33,020,560	Western Gulf	80	10,204,198
Southeast	55	20,088,708	Pacific Northwest	12	941,642
Tennessee River	9	1,323,134	California	40	8,982,641
Ohio River	89	13,414,017	Great Basin	4	362,706
Lake Erie	20	3,414,628	Alaska	7	1,562,680
Upper Mississippi	100	16,539,562	Hawaii	1	600,000
Western Great Lakes	128	8,443,915	Puerto Rico	7	2,438,824
Missouri River	88	5,273,270			
Southwest-Lower Mississippi	96	18,213,178	Total	1,228	155,304,843

[1] This includes contracts whose descriptive information covers more than one single category of construction (e.g., sewage treatment, sewers, or water works).

U.S. GOVERNMENT PRINTING OFFICE: 1964 O 730-624